

Open ArdBir Connection diagram and integration manual

Thank you for supporting Open Ardbir project , in the following pages are collected all the info to set up your all in one board.

USB Driver Installation

Board comes with pre-installed Arduino UNO boot loader and last ArdBir SW version. In case you need to install new SW version or your own code customization you can manage through USB board and Arduino IDE. The board is detected as Arduino UNO but you need to install driver from FT232 UART converter.

The driver can be downloaded from the official page

<http://www.ftdichip.com/Drivers/VCP.htm>

download and install the one for your operating system

Once installed plug the USB cable and a virtual com port is created , select that port in the Arduino IDE

Boot and SW configuration

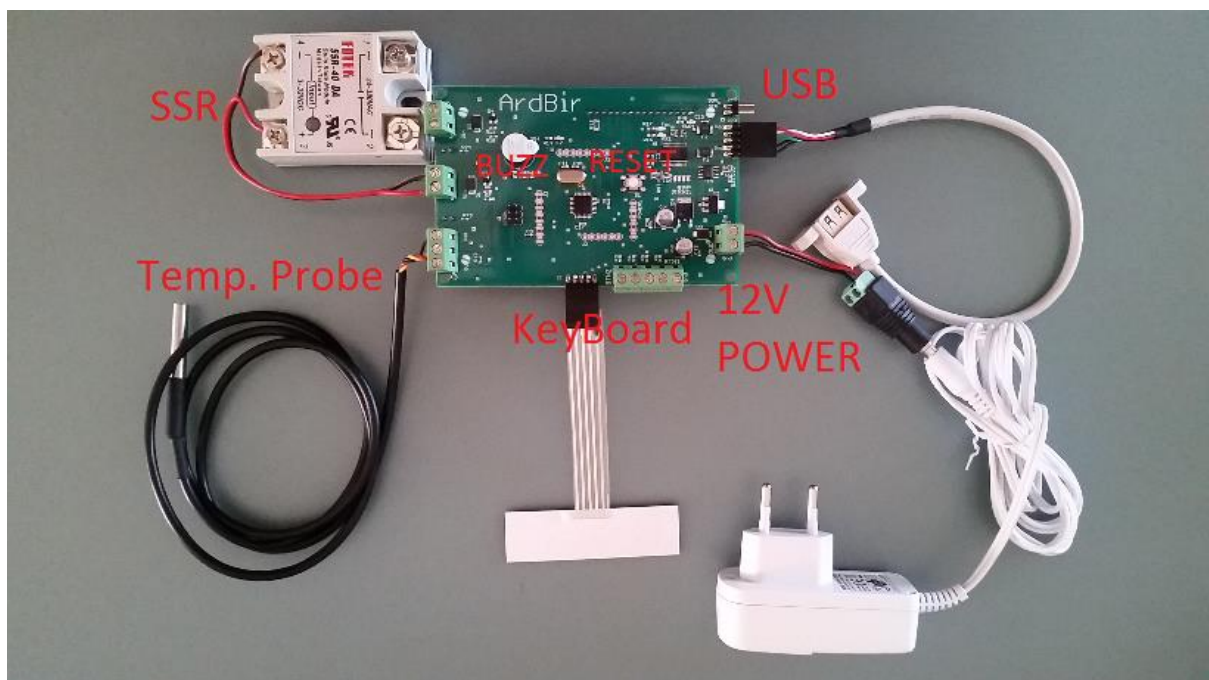
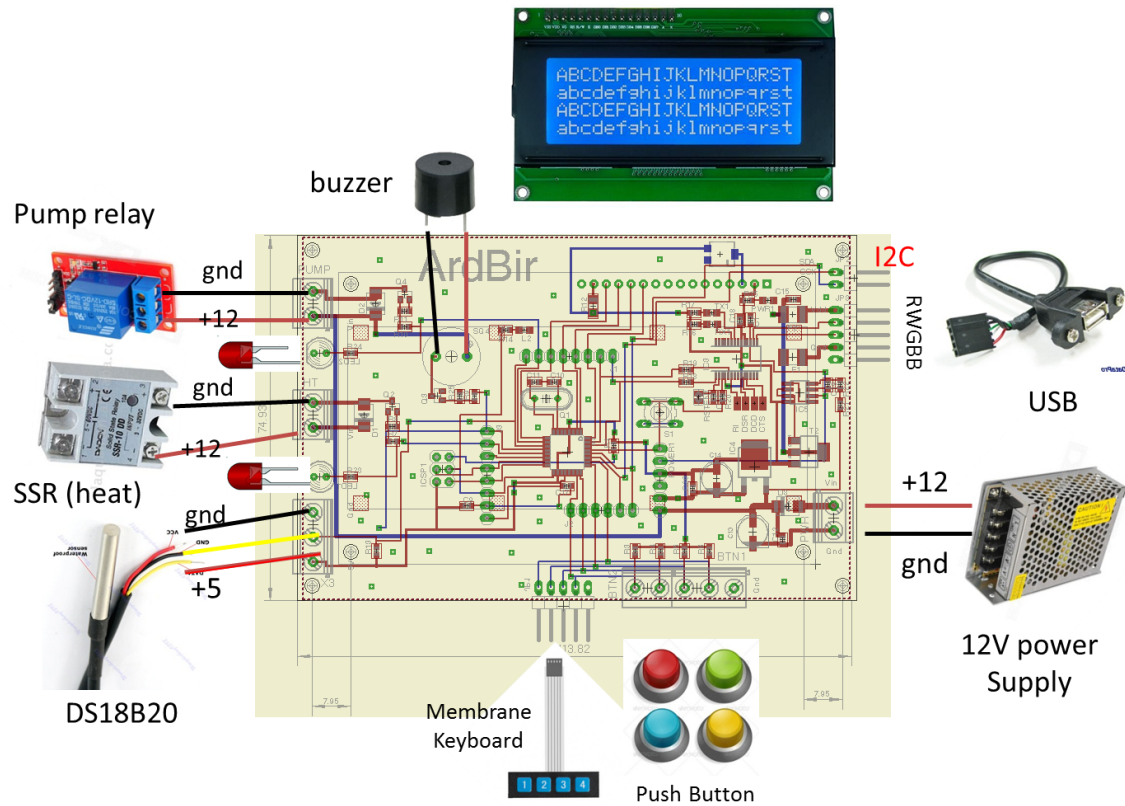
All in one board is pre-loaded with last SW version and is ready to go !

BEFORE any operation please remember to run a COMPLETE set up of the PID-PWM configuration and unit parameter configuration

All details are reported in the user manual

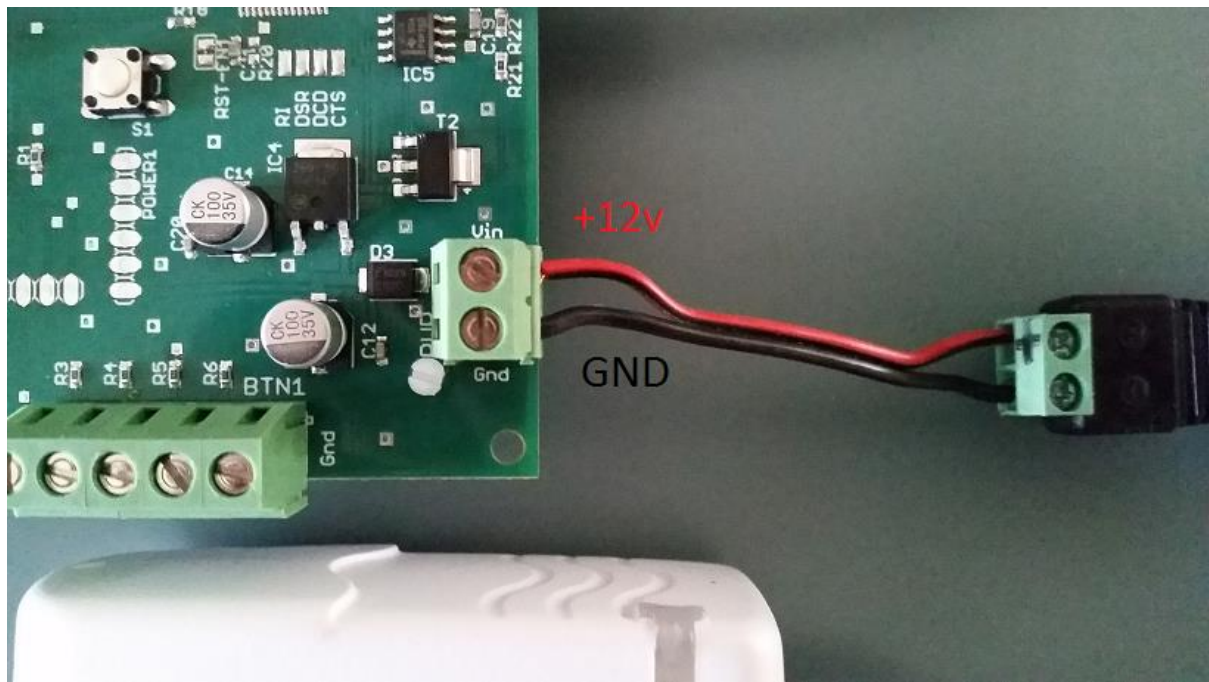
Connection Diagram

Below the overall connection schema of the all in one board

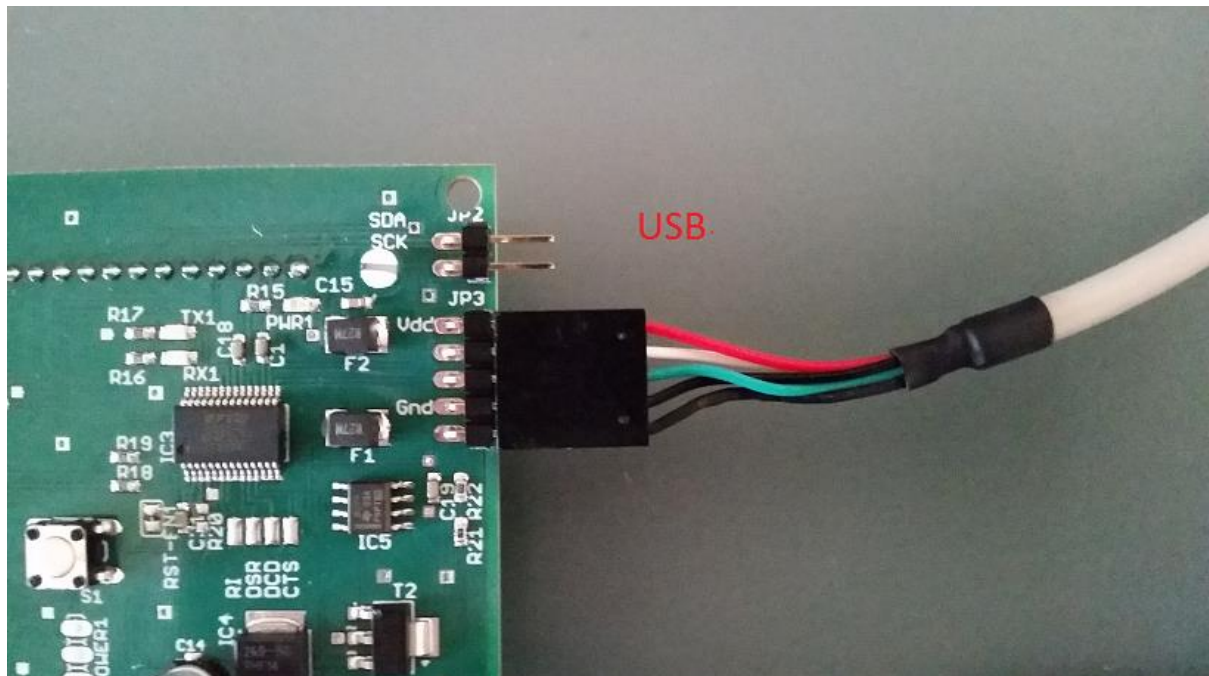


Power Supply

DC power supply should be connected as following

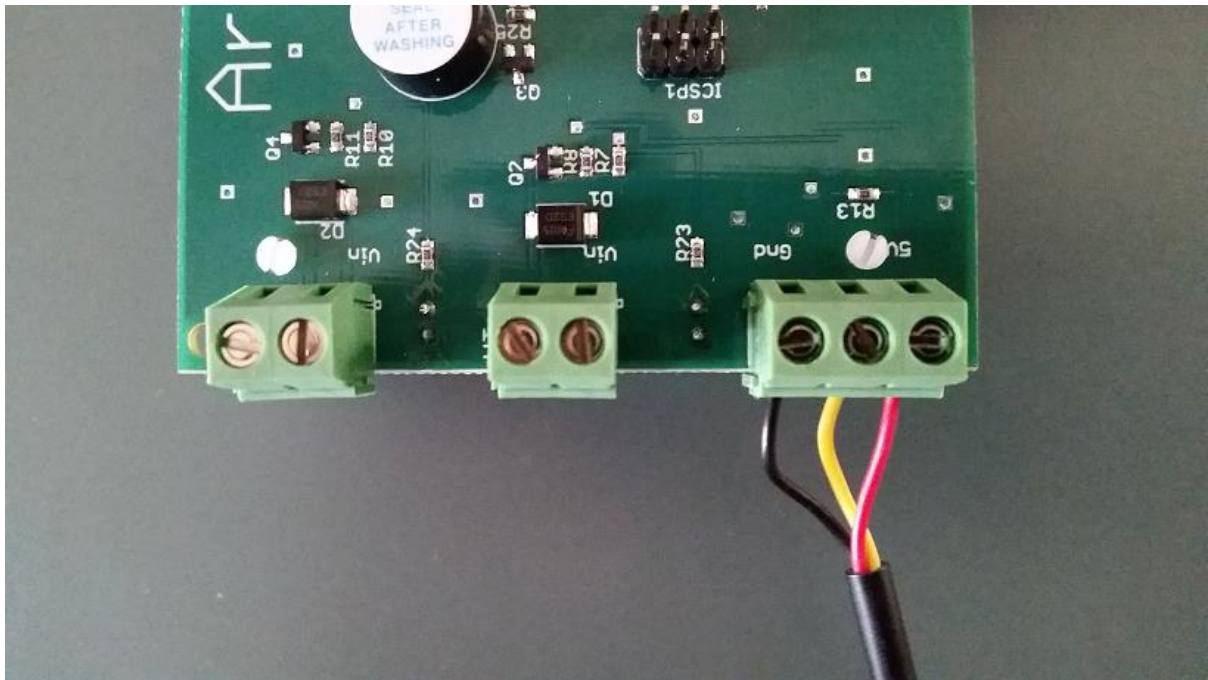


USB connector



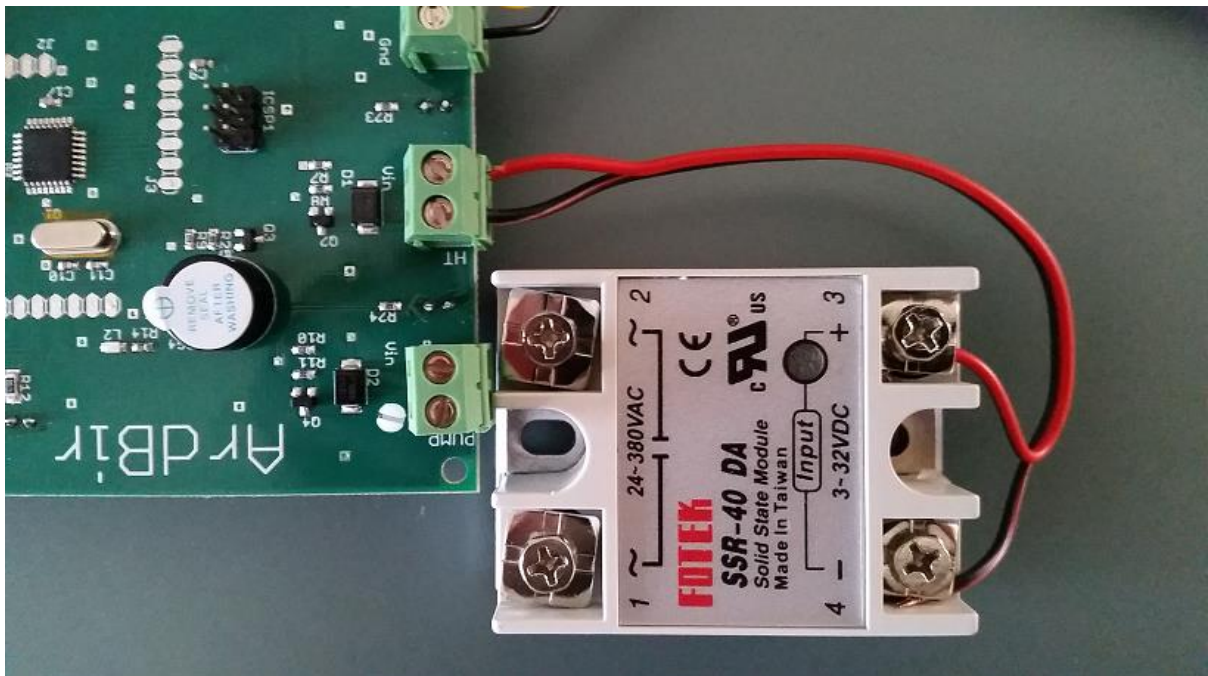
Temperature Probe

Connect DS18B20 as follow Red +5v, Black GND, Yellow Data



SSR (and Pump realy)

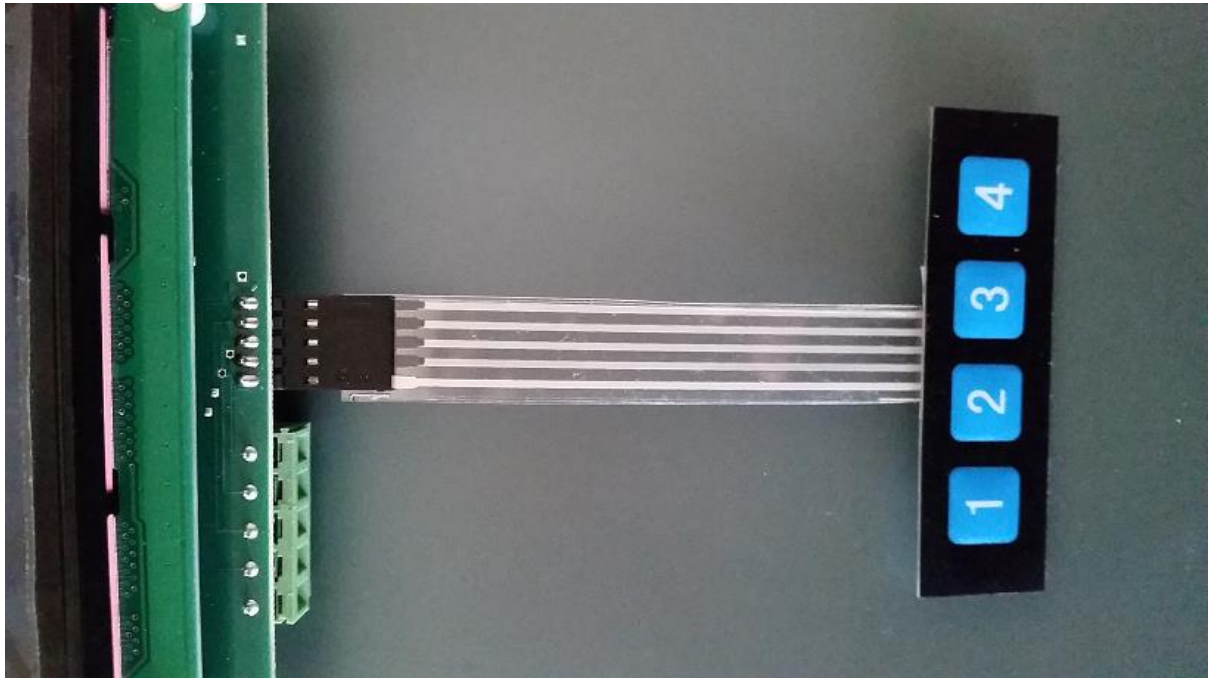
Connect SSR according the polarity



Keyboard Connection

The flat keyboard included in the KIT should be connected with the numbers on the display side

In case you use push button the screw connectors should be used and the GND/common is on the opposite side of the flat keyboard connector (see PCB)



LCD backlight trimmer

On the LCD side a trimmer allow you to regulate contrast and backligt

